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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/534,617

11/02/2005

Maurizio Lazzerini

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EXAMINER

HESS, DANIEL A

ART UNIT

PAPER NUMBER

2876

MAIL DATE

DELIVERY MODE

02/27/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<i>Office Action Summary</i>	Application No.	Applicant(s)	
	10/534,617	LAZZERINI, MAURIZIO	
	Examiner	Art Unit	
	DANIEL A. HESS	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2005.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-5, 9-11 and 13-15 is/are rejected.
7) ☒ Claim(s) 6-8 and 12 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 11 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/11/05</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

This action is responsive to applicant's filing of 11/2/2005.

Claim Rejections - 35 USC § 112

Claims 1-5, 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: there is nothing in the body of the claim language that forms any connection to the preamble term 'thread or strip' in the preamble. It is noted that according to a very broad reading of the claim language a 'strip' might be a smart card, and it is known in the art that smart cards with chips can be made by heating to mold around a chip and then curing to harden the card around the chip after it has been shaped.

On the other hand, it is understood from the specification and drawings that a 'strip' being a smart card is far from the meaning intended by the applicant.

Claim 6 provides language which gives substance to the preamble, for it recites that the security thread is wound around a spool, something that would make no sense for a smart card or many other plastic devices with embedded IC chips.

As discussed below, claim 6 is indicated as allowable.

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Claims 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: there is nothing in the body of the claim language that forms any connection to the preamble term ‘security thread’ in the preamble. It is noted that according to a very broad reading of the claim language could include a smart card, and it is known in the art that smart cards with chips can be made by heating to mold around a chip and then curing to harden the card around the chip after it has been shaped. Further smart transaction cards have long card things like characters, holograms and the like.

On the other hand, it is understood from the specification and drawings that a ‘thread’ being a smart card is far from the meaning intended by the applicant.

As discussed above, claim 6 is an example of language which gives substance to the preamble, for it recites that the security thread is wound around a spool, something that would make no sense for a smart card or many other plastic devices with embedded IC chips.

It is noted that with proper amendment, the chances of allowance of this claim are good.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Rayburn (US 3,943,685).

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Re claim 9: The term 'security thread' appears only in the preamble and thus is not taken to have weight beyond what is elaborated upon in the body of the claim. Further, the words 'preferably of polyester' are given no patentable weight because polyester is not being required in the claim, only suggested. Nevertheless, Rayburn teaches a chip carrier made of plastic.

As for the remainder of the claims, Rayburn clearly shows (figure 1 is exemplary) a thread (i.e. a carrier) which is made of plastic and carries chips. The support and substrate can be the same for the purposes of meeting the claim limitations. The chip components are attached to the carrier thread.

Re claim 10: Rayburn's carrier thread is plastic, which is certainly heat-sensitive.

Claim Rejections - 35 USC § 103

Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rayburn as applied to claim 9 above.

Re claim 11: It is widely understood that many more modern chip carriers used in manufacturing is a weak adhesive. As for the limitation 'preferably permanently active' this is only a suggestion and therefore carries no patentable weight.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rayburn as applied to claim 9 above, in further view of Asplund (US 6,293,470).

Re claim 13:

Lacking in Rayburn is a teaching that the chip on the thread comprises an antenna.

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Asplund teaches (figure 3 is instructive) an arrangement where there are threads of electronic components. As can be seen, any electronic component can be added this way.

In view of Asplund's teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known web to add an antenna to a smart card because as Asplund shows, this is an efficient way of mass card production and antenna are a common card element.

Allowable Subject Matter

Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:
The prior art fails to teach a security thread formed according to the claims where the thread can be wrapped around a spool and IC chips are deposited into the softened thread after it has been heated, such that the thread then bearing the IC chips is cooled to cure it.

Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to teach, in the context of all other limitations present, the application of a silicate/silicate layer as claimed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL A. HESS whose telephone number is (571)272-2392. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel A Hess/
Primary Examiner, Art Unit 2876
2/25/2009